



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/523,763

11/22/2005

Martin Vorbach

2885/92

7553

26646

7590

09/19/2008

KENYON & KENYON LLP
ONE BROADWAY
NEW YORK, NY 10004

EXAMINER

DINH, PAUL

ART UNIT

PAPER NUMBER

2825

MAIL DATE

DELIVERY MODE

09/19/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/523,763	Applicant(s) VORBACH ET AL.	
	Examiner Paul Dinh	Art Unit 2825	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 70-138 is/are pending in the application.
- 4a) Of the above claim(s) 70-86 and 95-138 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 87-94 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 April 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/7/05, 11/19/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is a response to the election filed on 8/21/08.

The examiner acknowledges the election of group 2 (claims 87-94) without traverse.

The Applicant is advised to cancel the non-elected claims in the next communication.

Drawings

Formal drawings should be submitted.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 87-94 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 87 recites:

"For at least one task to be processed:

Determining a plurality of element group systems in the multidimensional field that are suitable for processing the task;

Selecting a particular one of the plurality of suitable element group systems to process the task; and

Configuring the selected element group system into the field"

Claims 87 and dependencies are rejected because:

Task and element group systems are not clearly defined in claim 87; and

Claim 87 is rejected as being incomplete for omitting essential steps, such omission amounting to a gap between the elements. See MPEP § 2172.01; the limitation "suitable for processing the task" in claim 87 is incomplete without essential steps to indicate the suitability, i.e., suitability based on what

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Regarding claim 88, the phrase "likely" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Claim 94 is rejected as being incomplete for omitting essential steps, such omission amounting to a gap between the elements. See MPEP § 2172.01; the limitation "in a manner at least largely free of delay" in claim 87 is incomplete without essential steps to achieve *free of delay*.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form

The basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless –
(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.*

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 87-88, 92-94 are rejected under 35 U.S.C. 102(b) as being anticipated by the prior art of record Rupp (USP 5784636)

(Claims 87-88)

(Claims 87-88) For at least one task to be processed:

determining a plurality of element group systems in the multidimensional field that are suitable for processing the task (*i.e., one or more of: fig 2-3, 5, 9-11, 13, 16-17,*

Art Unit: 2825

the element group systems in one or more of these figure are multidimensional field (i.e., programmable logic structure, FPGA));

Selecting a particular one of the plurality of suitable element group systems to process the task (i.e., one or more of col 39, 26-27, 30, 32); and

Configuring the selected element group system into the field (i.e., one or more of col 35-38 and/or or more of: fig 2-3, 5, 9-11, 13, 16-17 configuring the selected element group system into the field)

(Claims 92-94) beginning a processing of the task using a first element group system until a preselected event occurs (i.e., one or more of fig 7-11, 16-17, 20-22); and in response to the preselected event, continuing the processing of the task using a second element group system with at least a partial reconfiguration (one or more of col 15 line 53, col 8 line 18, table 10) of the field, wherein: the element group systems of the plurality of element group systems differ with regard to a processing speed (different pipeline speed, (i.e., one or more of fig 7-8, 11, 18-120, 28) ; and the selection of the particular element group system is made based on at least determined maximum achievable processing speeds (i.e., see one or more of high speed throughput in summary, very high bandwidth data transfer , RSP includes high speed reconfiguration capabilities, configurable logic may first be used to perform high speed data collection (col 7), high speed processing (col 9, high speed logic resource, high speed pipeline arithmetic (col 10), high speed operation of functional units (col 11), etc) of the plurality of element group systems; determining functions and interconnections of cells of the element group system (one or more of fig 3, 5, 10); wherein: the determined interconnection allows for a transmission of data from cell to cell in a manner at least largely free of delay (by placing cell close to each other as shown in fig 5, 12-13, 29-32) insofar the limitation is understood); and for the determination of the interconnection of the cells, cells not situated directly side by side and separated in width by a distance smaller than a length of the cells are considered neighbor cells between which data is transmissible within **one of** one clock pulse and a low number of clock pulses (low is a relative term).

Art Unit: 2825

Claim 87 is rejected under 35 U.S.C. 102(e) as being anticipated by Vorbach (US 2003/0135686)

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

For at least one task to be processed:

Determining a plurality of element group systems in the multidimensional field that are suitable for processing the task (i.e., one or more of par 227, 244, 256; 260-262, 264)

Selecting a particular one of the plurality of suitable element group systems to process the task (i.e., one or more of par 227, 244, 256; 260-262, 264); and

Configuring the selected element group system into the field (the selected element group system configured into the field (i.e., FPGA, multi-dimensional programmable cell architecture))

Allowable Subject Matter

Claims 89-91 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Dinh whose telephone number is 571-272-1890. If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Jack Chiang can be reached on 571-272-7483. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2825

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Paul Dinh/

Primary Examiner, Art Unit 2825